```
FILE 'HOME' ENTERED AT 15:23:01 ON 13 MAR 2002

=> index bioscience medicine
FILE 'DRUGMONOG' ACCESS NOT AUTHORIZED
COST IN U.S. DOLLARS                                    SINCE FILE      TOTAL
                                                           ENTRY    SESSION
FULL ESTIMATED COST                                         0.15       0.15

INDEX 'ADISALERTS, ADISINSIGHT, ADISNEWS, AGRICOLA, ANABSTR, AQUASCI,
       BIOBUSINESS, BIOCOMMERCE, BIOSIS, BIOTECHABS, BIOTECHDS, BIOTECHNO, CABA,
       CANCERLIT, CAPLUS, CEABA-VTB, CEN, CIN, CONFSCI, CROPB, CROPU, DDFB,
       DDFU, DGENE, DRUGB, DRUGLAUNCH, DRUGMONOG2, ...'
ENTERED AT 15:23:31 ON 13 MAR 2002

64 FILES IN THE FILE LIST IN STNINDEX

Enter SET DETAIL ON to see search term postings or to view
search error messages that display as 0* with SET DETAIL OFF.

=> s kinas? and biliverd? and reductas
=> s kinas? and biliverd? and reductas?
          3   FILE BIOSIS
          1   FILE BIOTECHNO
          2   FILE CABA
          1   FILE CANCERLIT
         10   FILE CAPLUS
  31 FILES SEARCHED...
          2   FILE EMBASE
          1   FILE ESBIOBASE
          3   FILE GENBANK
          6   FILE MEDLINE
          2   FILE PASCAL
          4   FILE SCISEARCH
          8   FILE TOXCENTER
          7   FILE USPATFULL

  13 FILES HAVE ONE OR MORE ANSWERS,   64 FILES SEARCHED IN STNINDEX

L1   QUE KINAS? AND BILIVERD? AND REDUCTAS?

=> d rank
F1        10   CAPLUS
F2         8   TOXCENTER
F3         7   USPATFULL
F4         6   MEDLINE
F5         4   SCISEARCH
F6         3   BIOSIS
F7         3   GENBANK
F8         2   CABA
F9         2   EMBASE
F10        2   PASCAL
F11        1   BIOTECHNO
F12        1   CANCERLIT
F13        1   ESBIOBASE


=> file f1-f6
COST IN U.S. DOLLARS                                    SINCE FILE      TOTAL
                                                           ENTRY    SESSION
FULL ESTIMATED COST                                         1.41       1.56

FILE 'CAPLUS' ENTERED AT 15:25:15 ON 13 MAR 2002
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
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PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

FILE 'TOXCENTER' ENTERED AT 15:25:15 ON 13 MAR 2002

FILE 'USPATFULL' ENTERED AT 15:25:15 ON 13 MAR 2002

FILE 'MEDLINE' ENTERED AT 15:25:15 ON 13 MAR 2002

FILE 'SCISEARCH' ENTERED AT 15:25:15 ON 13 MAR 2002

FILE 'BIOSIS' ENTERED AT 15:25:15 ON 13 MAR 2002

=> s kinas? and biliverd? and reductas?
L2 38 KINAS? AND BILIVERD? AND REDUCTAS?

=> dup rem l2
PROCESSING COMPLETED FOR L2
L3 24 DUP REM L2 (14 DUPLICATES REMOVED)

=> d ti 1-24

L3 ANSWER 1 OF 24 MEDLINE
TI Human **Biliverdin Reductase** Is a Leucine Zipper-like DNA-binding Protein and Functions in Transcriptional Activation of Heme Oxygenase-1 by Oxidative Stress.

L3 ANSWER 2 OF 24 CAPLUS COPYRIGHT 2002 ACS DUPLICATE 1
TI Detection of variations in the DNA methylation profile of genes in the determining the risk of disease

L3 ANSWER 3 OF 24 CAPLUS COPYRIGHT 2002 ACS DUPLICATE 2
TI Single nucleotide polymorphisms in human genes

L3 ANSWER 4 OF 24 CAPLUS COPYRIGHT 2002 ACS DUPLICATE 3
TI Methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile

L3 ANSWER 5 OF 24 CAPLUS COPYRIGHT 2002 ACS DUPLICATE 4
TI Nucleic acids and proteins associated with cancer as antitumor targets

L3 ANSWER 6 OF 24 USPATFULL
TI Nanogel networks and biological agent compositions thereof

L3 ANSWER 7 OF 24 CAPLUS COPYRIGHT 2002 ACS DUPLICATE 5
TI Human **biliverdin reductase** is autophosphorylated, and phosphorylation is required for bilirubin formation

L3 ANSWER 8 OF 24 MEDLINE
TI Genetic engineering of phytochrome biosynthesis in bacteria.

L3 ANSWER 9 OF 24 SCISEARCH COPYRIGHT 2002 ISI (R)
TI Nuclear localization of **biliverdin reductase** in the rat kidney: Response to nephrotoxins that induce heme oxygenase-1

L3 ANSWER 10 OF 24 USPATFULL
TI Comparative gene transcript analysis

L3 ANSWER 11 OF 24 USPATFULL

TI Phytofluors as fluorescent labels

L3 ANSWER 12 OF 24 TOXCENTER COPYRIGHT 2002 ACS DUPLICATE 6
TI Heme oxygenase-2 acts to prevent neuronal death in brain cultures and following transient cerebral ischemia

L3 ANSWER 13 OF 24 CAPLUS COPYRIGHT 2002 ACS
TI Intracellular targets of cyclin-dependent **kinase** inhibitors: identification by affinity chromatography using immobilised inhibitors

L3 ANSWER 14 OF 24 CAPLUS COPYRIGHT 2002 ACS DUPLICATE 7
TI Gene probes used for genetic profiling in healthcare screening and planning

L3 ANSWER 15 OF 24 CAPLUS COPYRIGHT 2002 ACS DUPLICATE 8
TI Gene probes used for genetic profiling in healthcare screening and planning

L3 ANSWER 16 OF 24 CAPLUS COPYRIGHT 2002 ACS DUPLICATE 9
TI The oxidoreductase, **biliverdin reductase**, is induced in human renal carcinoma - pH and cofactor-specific increase in activity

L3 ANSWER 17 OF 24 SCISEARCH COPYRIGHT 2002 ISI (R)
TI Heme oxygenase carbon monoxide signalling pathway in atherosclerosis: anti-atherogenic actions of bilirubin and carbon monoxide?

L3 ANSWER 18 OF 24 USPATFULL
TI Aptamers specific for biomolecules and methods of making

L3 ANSWER 19 OF 24 USPATFULL
TI Nucleic acid preparation methods

L3 ANSWER 20 OF 24 USPATFULL
TI Nucleic acid preparation methods

L3 ANSWER 21 OF 24 USPATFULL
TI Preparation for nucleic acid samples

L3 ANSWER 22 OF 24 MEDLINE
TI Mapping of silver fox genes: chromosomal localization of the genes for GOT2, AK1, ALDOC, ACP1, ITPA, PGP, and BLVR.

L3 ANSWER 23 OF 24 CAPLUS COPYRIGHT 2002 ACS
TI Substance microdetermination in body fluids based on cyclic enzyme reactions

L3 ANSWER 24 OF 24 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.
TI RED CELL ENZYMES IN NEO NATAL HYPER BILIRUBINEMIA.

=> d l3 1-24

L3 ANSWER 1 OF 24 MEDLINE
AN 2002154727 IN-PROCESS
DN 21883916 PubMed ID: 11773068
TI Human **Biliverdin Reductase** Is a Leucine Zipper-like DNA-binding Protein and Functions in Transcriptional Activation of Heme Oxygenase-1 by Oxidative Stress.
AU Ahmad Zulfiqar; Salim Mohammad; Maines Mahin D
CS Department of Biochemistry and Biophysics, University of Rochester School of Medicine and Dentistry, Rochester, New York 14642.
SO JOURNAL OF BIOLOGICAL CHEMISTRY, (2002 Mar 15) 277 (11) 9226-32. Journal code: 2985121R. ISSN: 0021-9258.

CY United States
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS IN-PROCESS; NONINDEXED; Priority Journals
ED Entered STN: 20020312
Last Updated on STN: 20020312

L3 ANSWER 2 OF 24 CAPLUS COPYRIGHT 2002 ACS DUPLICATE 1
AN 2001:763235 CAPLUS
DN 135:314399
TI Detection of variations in the DNA methylation profile of genes in the determining the risk of disease
IN Berlin, Kurt; Piepenbrock, Christian; Olek, Alexander
PA Epigenomics A.-G., Germany
SO PCT Int. Appl., 636 pp.
CODEN: PIXXD2
DT Patent
LA German
FAN.CNT 39

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2001077373	A2	20011018	WO 2001-DE1486	20010406
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
	DE 10019058	A1	20011220	DE 2000-10019058	20000406
	WO 2001077373	A2	20011018	WO 2001-XA1486	20010406
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, CF, CG, CI, CM, GA, GW, ML, MR, NE, SN, TD, TG				
	WO 2001077373	A2	20011018	WO 2001-XB1486	20010406
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, CF, CG, CI, CM, GA, GW, ML, MR, NE, SN, TD, TG				
	WO 2001077373	A2	20011018	WO 2001-XC1486	20010406
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, CF, CG, CI, CM, GA, GW, ML, MR, NE, SN, TD, TG				
PRAI	DE 2000-10019058	A	20000406		

WO 2001-DE1486 W 20010406

L3 ANSWER 3 OF 24 CAPLUS COPYRIGHT 2002 ACS DUPLICATE 2
AN 2001:676999 CAPLUS
DN 135:252790
TI Single nucleotide polymorphisms in human genes
IN Cargill, Michele; Ireland, James S.; Lander, Eric S.
PA Whitehead Institute for Biomedical Research, USA
SO PCT Int. Appl., 145 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 2001066800	A2	20010913	WO 2001-US7268	20010307

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

PRAI US 2000-187510 P 20000307
US 2000-206129 P 20000522

L3 ANSWER 4 OF 24 CAPLUS COPYRIGHT 2002 ACS DUPLICATE 3
AN 2001:338762 CAPLUS
DN 134:362292
TI Methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile
IN Farr, Spencer
PA Phase-1 Molecular Toxicology, USA
SO PCT Int. Appl., 222 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 2001032928	A2	20010510	WO 2000-US30474	20001103

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

PRAI US 1999-165398 P 19991105
US 2000-196571 P 20000411

L3 ANSWER 5 OF 24 CAPLUS COPYRIGHT 2002 ACS DUPLICATE 4
AN 2001:320060 CAPLUS
DN 134:339179
TI Nucleic acids and proteins associated with cancer as antitumor targets
IN Burmer, Glenna C.; Brown, Joseph P.; Pritchard, David
PA Lifespan Biosciences, Inc., USA
SO PCT Int. Appl., 98 pp.
CODEN: PIXXD2

DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2001030964	A2	20010503	WO 2000-US29126	20001020
	WO 2001030964	A3	20010809		
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
	AU 2001013397	A5	20010508	AU 2001-13397	20001020
PRAI	US 1999-161232	P	19991022		
	US 2000-693783	A	20001019		
	WO 2000-US29126	W	20001020		

L3 ANSWER 6 OF 24 USPATFULL
AN 2001:234992 USPATFULL
TI Nanogel networks and biological agent compositions thereof
IN Kabanov, Alexander V., Omaha, NE, United States
Vinogradov, Sergey V., Omaha, NE, United States
PA Supratek Pharma, Inc., Canada (non-U.S. corporation)
PI US 6333051 B1 20011225
AI US 1998-146651 19980903 (9)
DT Utility
FS GRANTED
LN.CNT 2246
INCL INCLM: 424/484.000
INCLS: 424/001.650; 424/130.100; 424/600.000; 424/486.000; 521/025.000; 523/404.000; 523/414.000; 514/001.000; 514/002.000; 514/044.000; 525/326.100
NCL NCLM: 424/484.000
NCLS: 424/001.650; 424/130.100; 424/486.000; 424/600.000; 514/001.000; 514/002.000; 514/044.000; 521/025.000; 523/404.000; 523/414.000; 525/326.100
IC [7]
ICM: A61K009-14
ICS: C08J005-20; C08K003-20; A01N061-00; C08F132-00
EXF 521/25; 523/404; 523/414; 514/1; 514/44; 514/2; 525/326.1; 424/484; 424/486; 424/1.65; 424/130.1; 424/600
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L3 ANSWER 7 OF 24 CAPLUS COPYRIGHT 2002 ACS DUPLICATE 5
AN 2001:394990 CAPLUS
DN 135:118657
TI Human **biliverdin reductase** is autophosphorylated, and phosphorylation is required for bilirubin formation
AU Salim, Mohammad; Brown-Kipphut, Brigette A.; Maines, Mahin D.
CS Department of Biochemistry / Biophysics, University of Rochester School of Medicine, Rochester, NY, 14642, USA
SO J. Biol. Chem. (2001), 276(14), 10929-10934
CODEN: JBCHA3; ISSN: 0021-9258
PB American Society for Biochemistry and Molecular Biology
DT Journal
LA English
RE.CNT 47 THERE ARE 47 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 8 OF 24 MEDLINE
AN 2001504134 MEDLINE
DN 21438035 PubMed ID: 11553807
TI Genetic engineering of phytochrome biosynthesis in bacteria.
AU Gambetta G A; Lagarias J C
CS Section of Molecular and Cellular Biology, University of California, Davis, CA 95616, USA.
SO PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AMERICA, (2001 Sep 11) 98 (19) 10566-71.
Journal code: PV3; 7505876. ISSN: 0027-8424.
CY United States
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals
EM 200111
ED Entered STN: 20010913
Last Updated on STN: 20011105
Entered Medline: 20011101

L3 ANSWER 9 OF 24 SCISEARCH COPYRIGHT 2002 ISI (R)
AN 2001:204445 SCISEARCH
GA The Genuine Article (R) Number: 404TD
TI Nuclear localization of **biliverdin reductase** in the rat kidney: Response to nephrotoxins that induce heme oxygenase-1
AU Maines M D (Reprint); Ewing J F; Huang T J; Panahian N
CS Univ Rochester, Med Ctr, Dept Biochem & Biophys, 601 Elmwood Ave, Rochester, NY 14642 USA (Reprint); Univ Rochester, Med Ctr, Dept Biochem & Biophys, Rochester, NY 14642 USA
CYA USA
SO JOURNAL OF PHARMACOLOGY AND EXPERIMENTAL THERAPEUTICS, (MAR 2001) Vol. 296, No. 3, pp. 1091-1097.
Publisher: AMER SOC PHARMACOLOGY EXPERIMENTAL THERAPEUTICS, 9650 ROCKVILLE PIKE, BETHESDA, MD 20814-3998 USA.
ISSN: 0022-3565.
DT Article; Journal
LA English
REC Reference Count: 46
ABSTRACT IS AVAILABLE IN THE ALL AND IALL FORMATS

L3 ANSWER 10 OF 24 USPATFULL
AN 2000:117495 USPATFULL
TI Comparative gene transcript analysis
IN Seilhamer, Jeffrey J., Los Altos Hills, CA, United States
Scott, Randal W., Mountain View, CA, United States
PA Incyte Pharmaceuticals, Inc., Palo Alto, CA, United States (U.S. corporation)
PI US 6114114 20000905
AI US 1994-282955 19940729 (8)
RLI Continuation-in-part of Ser. No. US 1994-187530, filed on 27 Jan 1994, now patented, Pat. No. US 5840484 which is a continuation-in-part of Ser. No. US 1994-179873, filed on 11 Jan 1994, now abandoned Ser. No. Ser. No. US 1993-137951, filed on 14 Oct 1993, now abandoned And Ser. No. US 1993-100523, filed on 3 Aug 1993, now abandoned which is a continuation-in-part of Ser. No. US 1992-977780, filed on 19 Nov 1992, now abandoned which is a continuation-in-part of Ser. No. US 1992-916491, filed on 17 Jul 1992, now abandoned
DT Utility
FS Granted
LN.CNT 5074
INCL INCLM: 435/006.000
INCLS: 364/413.020
NCL NCLM: 435/006.000
NCLS: 702/019.000; 702/020.000

IC [7]
ICM: C12Q001-68
EXF 435/6; 364/413.02
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L3 ANSWER 11 OF 24 USPATFULL
AN 2000:40859 USPATFULL
TI Phytofluors as fluorescent labels
IN Lagarias, John Clark, Davis, CA, United States
Murphy, John Thomas, San Francisco, CA, United States
PA The Regents of the University of California, Oakland, CA, United States (U.S. corporation)
PI US 6046014 20000404
AI US 1997-904871 19970801 (8)
PRAI US 1996-23217 19960802 (60)
DT Utility
FS Granted
LN.CNT 3666
INCL INCLM: 435/007.700
INCLS: 530/350.000; 435/183.000
NCL NCLM: 435/007.700
NCLS: 435/183.000; 530/350.000
IC [7]
ICM: G01N033-53
EXF 530/350; 435/183
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L3 ANSWER 12 OF 24 TOXCENTER COPYRIGHT 2002 ACS DUPLICATE 6
AN 2001:3669 TOXCENTER
DN 20432500 PubMed ID: 10974422
TI Heme oxygenase-2 acts to prevent neuronal death in brain cultures and following transient cerebral ischemia
AU Dore S; Goto S; Sampei K; Blackshaw S; Hester L D; Ingi T; Sawa A; Traystman R J; Koehler R C; Snyder S H
CS Department of Neuroscience, The Johns Hopkins University, School of Medicine, 725 N. Wolfe Street, MD, Baltimore 21205, USA
NC DA00074 (NIDA)
DA00266 (NIDA)
NS20020 (NINDS)
SO NEUROSCIENCE, (2000) 99 (4) 587-92.
Journal Code: NZR. ISSN: 0306-4522.
CY United States
DT Journal; Article; (JOURNAL ARTICLE)
FS MEDLINE
OS MEDLINE 2001017186
LA English
ED Entered STN: 20011116
Last Updated on STN: 20011116

L3 ANSWER 13 OF 24 CAPLUS COPYRIGHT 2002 ACS
AN 2000:439429 CAPLUS
DN 133:187904
TI Intracellular targets of cyclin-dependent **kinase** inhibitors: identification by affinity chromatography using immobilised inhibitors
AU Knockaert, M.; Gray, N.; Damiens, E.; Chang, Y-T.; Grellier, P.; Grant, K.; Fergusson, D.; Mottram, J.; Soete, M.; Dubremetz, J-F.; Le Roch, K.; Doerig, C.; Schultz, P. G.; Meijer, L.
CS Station Biologique de Roscoff, CNRS, Roscoff, 29682, Fr.
SO Chem. Biol. (2000), 7(6), 411-422
CODEN: CBOLE2; ISSN: 1074-5521
PB Elsevier Science Ltd.
DT Journal
LA English

RE.CNT 49 THERE ARE 49 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 14 OF 24 CAPLUS COPYRIGHT 2002 ACS DUPLICATE 7
AN 1999:795994 CAPLUS
DN 132:31744
TI Gene probes used for genetic profiling in healthcare screening and planning
IN Roberts, Gareth Wyn
PA Genostic Pharma Ltd., UK
SO PCT Int. Appl., 745 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9964627	A2	19991216	WO 1999-GB1780	19990604

W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

PRAI	GB 1998-12099	A	19980606
	GB 1998-13291	A	19980620
	GB 1998-13611	A	19980624
	GB 1998-13835	A	19980627
	GB 1998-14110	A	19980701
	GB 1998-14580	A	19980707
	GB 1998-15438	A	19980716
	GB 1998-15574	A	19980718
	GB 1998-15576	A	19980718
	GB 1998-16085	A	19980724
	GB 1998-16086	A	19980724
	GB 1998-16921	A	19980805
	GB 1998-17097	A	19980807
	GB 1998-17200	A	19980808
	GB 1998-17632	A	19980814
	GB 1998-17943	A	19980819

L3 ANSWER 15 OF 24 CAPLUS COPYRIGHT 2002 ACS DUPLICATE 8
AN 1999:795993 CAPLUS
DN 132:31743
TI Gene probes used for genetic profiling in healthcare screening and planning
IN Roberts, Gareth Wyn
PA Genostic Pharma Limited, UK
SO PCT Int. Appl., 149 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9964626	A2	19991216	WO 1999-GB1779	19990604

W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ,

TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

	AU 9941586	A1	19991230	AU 1999-41586	19990604
	AU 9941587	A1	19991230	AU 1999-41587	19990604
	GB 2339200	A1	20000119	GB 1999-12914	19990604
	GB 2339200	B2	20010912		
	EP 1084273	A1	20010321	EP 1999-925207	19990604
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
PRAI	GB 1998-12098	A	19980606		
	GB 1998-28289	A	19981223		
	GB 1998-16086	A	19980724		
	GB 1998-16921	A	19980805		
	GB 1998-17097	A	19980807		
	GB 1998-17200	A	19980808		
	GB 1998-17632	A	19980814		
	GB 1998-17943	A	19980819		
	WO 1999-GB1779	W	19990604		

L3 ANSWER 16 OF 24 CAPLUS COPYRIGHT 2002 ACS DUPLICATE 9
AN 1999:644909 CAPLUS
DN 132:164272
TI The oxidoreductase, **biliverdin reductase**, is induced in human renal carcinoma - pH and cofactor-specific increase in activity
AU Maines, Mahin D.; Mayer, Robert D.; Erturk, Erdal; Huang, Tian J.; Disantagnese, Anthony
CS Departments of Biochemistry and Biophysics, Urology, and Pathology and Laboratory Medicine, University of Rochester School of Medicine, Rochester, NY, USA
SO J. Urol. (Baltimore) (1999), 162(4), 1467-1472
CODEN: JOURAA; ISSN: 0022-5347
PB Lippincott Williams & Wilkins
DT Journal
LA English
RE.CNT 45 THERE ARE 45 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 17 OF 24 SCISEARCH COPYRIGHT 2002 ISI (R)
AN 1999:230114 SCISEARCH
GA The Genuine Article (R) Number: 176EJ
TI Heme oxygenase carbon monoxide signalling pathway in atherosclerosis: anti-atherogenic actions of bilirubin and carbon monoxide?
AU Siow R C M; Sato H; Mann G E (Reprint)
CS UNIV LONDON KINGS COLL, SCH BIOMED SCI, VASC BIOL RES CTR, CAMPDEN HILL RD, LONDON W8 7AH, ENGLAND (Reprint); UNIV LONDON KINGS COLL, SCH BIOMED SCI, VASC BIOL RES CTR, LONDON W8 7AH, ENGLAND
CYA ENGLAND
SO CARDIOVASCULAR RESEARCH, (FEB 1999) Vol. 41, No. 2, pp. 385-394.
Publisher: ELSEVIER SCIENCE BV, PO BOX 211, 1000 AE AMSTERDAM, NETHERLANDS.
ISSN: 0008-6363.
DT General Review; Journal
FS LIFE; CLIN
LA English
REC Reference Count: 110
ABSTRACT IS AVAILABLE IN THE ALL AND IALL FORMATS

L3 ANSWER 18 OF 24 USPATFULL
AN 1998:57716 USPATFULL
TI Aptamers specific for biomolecules and methods of making

IN Griffin, Linda, Atherton, CA, United States
Albrecht, Glenn, Redwood City, CA, United States
Latham, John, Palo Alto, CA, United States
Leung, Lawrence, Hillsborough, CA, United States
Vermaas, Eric, Oakland, CA, United States
Toole, John J., Burlingame, CA, United States
PA Gilead Sciences, Inc., Foster City, CA, United States (U.S. corporation)
PI US 5756291 19980526
AI US 1995-484192 19950607 (8)
RLI Continuation of Ser. No. US 1992-934387, filed on 21 Aug 1992, now abandoned
DT Utility
FS Granted
LN.CNT 8242
INCL INCLM: 435/006.000
INCLS: 536/023.100; 530/413.000; 935/077.000; 935/078.000
NCL NCLM: 435/006.000
NCLS: 530/413.000; 536/023.100
IC [6]
ICM: C12Q001-68
ICS: C07K001-14; C07H021-04; C07H021-02
EXF 435/6; 935/77; 935/78; 530/413; 536/23.1
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L3 ANSWER 19 OF 24 USPATFULL
AN 97:68351 USPATFULL
TI Nucleic acid preparation methods
IN Lin, Lily, Berkeley, CA, United States
PA HRI Research, Inc., Concord, CA, United States (U.S. corporation)
PI US 5654179 19970805
AI US 1994-317220 19941003 (8)
RLI Continuation of Ser. No. US 1993-44649, filed on 8 Apr 1993, now abandoned which is a continuation-in-part of Ser. No. US 1992-901545, filed on 19 Jun 1992, now abandoned which is a continuation-in-part of Ser. No. US 1990-614921, filed on 14 Nov 1990, now patented, Pat. No. US 5284940, issued on 8 Feb 1994
DT Utility
FS Granted
LN.CNT 2765
INCL INCLM: 435/091.200
INCLS: 435/270.000; 436/177.000; 436/825.000; 536/025.400; 536/025.410; 536/025.420
NCL NCLM: 435/091.200
NCLS: 435/270.000; 436/177.000; 436/825.000; 536/025.400; 536/025.410; 536/025.420
IC [6]
ICM: C12P019-34
ICS: C07H021-02
EXF 435/91.2; 435/270; 536/25.4; 536/25.41; 536/25.42; 436/177; 436/825
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L3 ANSWER 20 OF 24 USPATFULL
AN 97:31574 USPATFULL
TI Nucleic acid preparation methods
IN Lin, Lily, Berkeley, CA, United States
Cimino, George, Richmond, CA, United States
Zhu, Yu S., Richmond, CA, United States
PA HRI Research, Inc., Concord, CA, United States (U.S. corporation)
PI US 5620852 19970415
AI US 1994-332616 19941031 (8)
RLI Continuation of Ser. No. US 1992-901545, filed on 19 Jun 1992, now abandoned which is a continuation-in-part of Ser. No. US 1990-614921, filed on 14 Nov 1990, now patented, Pat. No. US 5284940

DT Utility
FS Granted
LN.CNT 2451
INCL INCLM: 435/006.000
INCLS: 536/025.300; 536/022.100; 435/091.100
NCL NCLM: 435/006.000
NCLS: 435/091.100; 536/022.100; 536/025.300
IC [6]
ICM: C12Q001-68
ICS: C12P019-34
EXF 536/25.4; 536/25.41; 536/25.42; 536/25.3; 435/6
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L3 ANSWER 21 OF 24 USPATFULL
AN 94:11507 USPATFULL
TI Preparation for nucleic acid samples
IN Lin, Lily, Berkeley, CA, United States
Isaacs, Stephen T., Orinda, CA, United States
Hearst, John E., Berkeley, CA, United States
PA HRI Research, Inc., Concord, CA, United States (U.S. corporation)
PI US 5284940 19940208
AI US 1990-614921 19901114 (7)
DT Utility
FS Granted
LN.CNT 2082
INCL INCLM: 536/025.400
INCLS: 536/025.410; 536/025.420; 435/006.000; 435/270.000
NCL NCLM: 536/025.400
NCLS: 435/006.000; 435/270.000; 536/025.410; 536/025.420
IC [5]
ICM: C07H023-00
ICS: C12Q001-68; C12N001-08
EXF 435/270; 435/280; 435/6; 435/262; 435/259; 435/805; 536/27; 536/28; 536/25.4; 536/25.41; 536/25.42
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L3 ANSWER 22 OF 24 MEDLINE
AN 91275602 MEDLINE
DN 91275602 PubMed ID: 1647290
TI Mapping of silver fox genes: chromosomal localization of the genes for GOT2, AK1, ALDOC, ACP1, ITPA, PGP, and BLVR.
AU Nesterova T B; Nikitina I V; Zakian S M; Rubtsov N B; Matveeva V G; Radjabli S I
CS Institute of Cytology and Genetics, Academy of Sciences of the USSR, Siberian Branch, Novosibirsk.
SO CYTOGENETICS AND CELL GENETICS, (1991) 56 (3-4) 185-8.
Journal code: DXK; 0367735. ISSN: 0301-0171.
CY Switzerland
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals
EM 199108
ED Entered STN: 19910818
Last Updated on STN: 19980206
Entered Medline: 19910801

L3 ANSWER 23 OF 24 CAPLUS COPYRIGHT 2002 ACS
AN 1989:530268 CAPLUS
DN 111:130268
TI Substance microdetermination in body fluids based on cyclic enzyme reactions
IN Miwa, Shigeru
PA Immunobion K. K., Japan

SO Jpn. Kokai Tokkyo Koho, 10 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 63116700	A2	19880520	JP 1986-261558	19861101

L3 ANSWER 24 OF 24 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.
AN 1976:66928 BIOSIS
DN BR12:66928
TI RED CELL ENZYMES IN NEO NATAL HYPER BILIRUBINEMIA.
AU MCCULLOCH J C; KELLY A M
SO Clin. Chem. (Winston-Salem, N. C.), (1975) 21 (7), 982.
CODEN: CLCHAU. ISSN: 0009-9147.
DT Conference
FS BR; OLD
LA Unavailable

=> FIL STNGUIDE

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	42.35	43.91

FILE 'STNGUIDE' ENTERED AT 15:31:52 ON 13 MAR 2002
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AND TECHNOLOGY CORPORATION, AND FACHINFORMATIONSZENTRUM KARLSRUHE

FILE CONTAINS CURRENT INFORMATION.
LAST RELOADED: Mar 8, 2002 (20020308/UP).

=> FIL F1-F6

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	0.00	43.91

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CA INDEXING COPYRIGHT (C) 2002 AMERICAN CHEMICAL SOCIETY (ACS)

FILE 'MEDLINE' ENTERED AT 15:32:32 ON 13 MAR 2002

FILE 'SCISEARCH' ENTERED AT 15:32:32 ON 13 MAR 2002
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FILE 'BIOSIS' ENTERED AT 15:32:32 ON 13 MAR 2002
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=> d his

(FILE 'HOME' ENTERED AT 15:23:01 ON 13 MAR 2002)

INDEX 'ADISALERTS, ADISINSIGHT, ADISNEWS, AGRICOLA, ANABSTR, AQUASCI,

BIOBUSINESS, BIOCOMMERCE, BIOSIS, BIOTECHABS, BIOTECHDS, BIOTECHNO, CABA, CANCERLIT, CAPLUS, CEABA-VTB, CEN, CIN, CONFSCI, CROPB, CROPU, DDFB, DDFU, DGENE, DRUGB, DRUGLAUNCH, DRUGMONOG2, ...' ENTERED AT 15:23:31 ON 13 MAR 2002

SEA KINAS? AND BILIVERD? AND REDUCTAS?

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3 FILE BIOSIS
1 FILE BIOTECHNO
2 FILE CABA
1 FILE CANCERLIT
10 FILE CAPLUS
2 FILE EMBASE
1 FILE ESBIOBASE
3 FILE GENBANK
6 FILE MEDLINE
2 FILE PASCAL
4 FILE SCISEARCH
8 FILE TOXCENTER
7 FILE USPATFULL

L1 QUE KINAS? AND BILIVERD? AND REDUCTAS?

FILE 'CAPLUS, TOXCENTER, USPATFULL, MEDLINE, SCISEARCH, BIOSIS' ENTERED AT 15:25:15 ON 13 MAR 2002

L2 38 S KINAS? AND BILIVERD? AND REDUCTAS?
L3 24 DUP REM L2 (14 DUPLICATES REMOVED)

FILE 'STNGUIDE' ENTERED AT 15:31:52 ON 13 MAR 2002

FILE 'CAPLUS, TOXCENTER, USPATFULL, MEDLINE, SCISEARCH, BIOSIS' ENTERED AT 15:32:32 ON 13 MAR 2002

=> d kwic 13 17, 16, 13, 12, 9, 7, 1

L3 ANSWER 17 OF 24 SCISEARCH COPYRIGHT 2002 ISI (R)
AB . . . identified as important cellular messengers involved in the regulation of vascular smooth muscle tone. Microsomal heme oxygenases degrade heme to **biliverdin** and CO, and the cytosolic enzyme **biliverdin reductase** then catalyzes reduction of **biliverdin** to bilirubin, both powerful chain-breaking antioxidants. Two principal isozymes of heme oxygenase have been identified, a constitutive isoform HO-2. (Mr. . .
STP KeyWords Plus (R): VASCULAR SMOOTH-MUSCLE; LOW-DENSITY-LIPOPROTEIN; NITRIC-OXIDE SYNTHASE; FACTOR-KAPPA-B; PROTEIN-**KINASE**-C; ENDOTHELIAL-CELLS; GENE-EXPRESSION; OXIDIZED LDL; ACTIVATOR PROTEIN-1; ANTIOXIDANT ENZYMES

L3 ANSWER 16 OF 24 CAPLUS COPYRIGHT 2002 ACS DUPLICATE 9
TI The oxidoreductase, **biliverdin reductase**, is induced in human renal carcinoma - pH and cofactor-specific increase in activity
AB **Biliverdin reductase** is an oxidoreductase unique among all enzymes characterized to date in having dual pH/dual cofactor requirement, NADH and NADPH at 6.7 and 8.7, resp. The protein shows extensive microheterogeneity that is caused by post-translational modification. The **reductase** converts the heme degrdn. product, **biliverdin**, to bilirubin. Bilirubin has been shown to inhibit responses of human lymphocytes, including phytohemagglutinin-induced proliferation, interleukin-2 prodn., and antibody dependent. . . mediated cytotoxicity. In addn. to acting as an antioxidant, it inhibits protein phosphorylation and activity of enzymes such as protein **kinase** C and NADPH oxidase. This research was to evaluate whether renal cell carcinoma differs from normal tissue in regard to the expression and activity of the **reductase**. Kidney tissue with or

without visible renal carcinoma and normal kidney tissue from a brain dead patient were frozen at -80C shortly after removal. Ten .mu.m tissue sections were used for immunostaining of **biliverdin reductase**, pooled isolated tumors and surrounding tissue that did not contain visible tumor were used for Northern blot anal. of mRNA. . . addnl. formalin fixed specimens of renal cell carcinoma were also used for immunostaining. There was a striking increase in the **reductase** protein levels, as visualized by immunostaining in tumor tissue cells. The increase was also evident by Western blotting, and involved in increased transcription of **biliverdin reductase** as suggested by Northern blot anal. The protein could also be detected in the infiltrating monocytes, macrophages, T cells, and. . . The enzyme activity was nearly doubled in the tumor tissue, but selectively with NADH as the cofactor. Thus, increases in **biliverdin reductase** expression and activity only with NADH are found in renal cell carcinoma. The net effects of this change are uncertain at present but several pathways, which could be affected by the **reductase**, may alter local physiol. **Biliverdin reductase** as a zinc metalloprotein may directly interact with other regulatory proteins, generation of increased bilirubin may alter immune function, and. . .

ST oxidoreductase **biliverdin reductase** renal cell carcinoma

IT Macrophage
Monocyte
Neutrophil
T cell (lymphocyte)
(**biliverdin reductase** expression and activity are increased in cells infiltrating human renal carcinoma)

IT Lymphocyte
(circulating; **biliverdin reductase** expression and activity are increased in cells infiltrating human renal carcinoma)

IT Kidney, neoplasm
(renal cell carcinoma; **biliverdin reductase** expression and activity are increased in human renal carcinoma, with NADH as cofactor)

IT 9074-10-6, **Biliverdin reductase**
RL: BAC (Biological activity or effector, except adverse); BPR (Biological process); BIOL (Biological study); PROC (Process)
(**biliverdin reductase** expression and activity are increased in human renal carcinoma, with NADH as cofactor)

IT 58-68-4, NADH
RL: BOC (Biological occurrence); BPR (Biological process); BIOL (Biological study); OCCU (Occurrence); PROC (Process)
(**biliverdin reductase** expression and activity are increased in human renal carcinoma, with NADH as cofactor)

L3 ANSWER 13 OF 24 CAPLUS COPYRIGHT 2002 ACS

TI Intracellular targets of cyclin-dependent **kinase** inhibitors: identification by affinity chromatography using immobilised inhibitors

AB Background: Chem. inhibitors of cyclin-dependent **kinases** (CDKs) have great therapeutic potential against various proliferative and neurodegenerative disorders. Olomoucine, a 2,6,9-trisubstituted purine, has been optimized for activity. . . were screened for proteins binding purvalanol B. In addn. to validating CDKs as intracellular targets, a variety of unexpected protein **kinases** were recovered from the I matrix. Casein **kinase** 1 (CK1) was identified as a principal I matrix binding protein in Plasmodium falciparum, Leishmania mexicana, Toxoplasma gondii and trypanosoma. . . That a simple batchwise affinity chromatog. approach using two purine derivs. facilitated isolation of a small set of highly purified **kinases** suggests that this could be a general method for identifying intracellular targets relevant to a particular class of ligands. This. . .

ST cyclin dependent **kinase** inhibitor intracellular target; affinity chromatog cyclin dependent **kinase** inhibitor target

IT Phosphoproteins
RL: BPR (Biological process); BIOL (Biological study); PROC (Process)
(gene cdk2; intracellular targets of cyclin-dependent **kinase** inhibitors and identification by affinity chromatog. using immobilized inhibitors)

IT Affinity chromatography
(intracellular targets of cyclin-dependent **kinase** inhibitors and identification by affinity chromatog. using immobilized inhibitors)

IT Phosphoproteins
RL: BPR (Biological process); BIOL (Biological study); PROC (Process)
(pp42mapk; intracellular targets of cyclin-dependent **kinase** inhibitors and identification by affinity chromatog. using immobilized inhibitors)

IT Phosphoproteins
RL: BPR (Biological process); BIOL (Biological study); PROC (Process)
(pp44mapk; intracellular targets of cyclin-dependent **kinase** inhibitors and identification by affinity chromatog. using immobilized inhibitors)

IT Protozoacides
(purvalanol B binding to casein **kinase** 1 in relation to; intracellular targets of cyclin-dependent **kinase** inhibitors and identification by affinity chromatog. using immobilized inhibitors)

IT Leishmania mexicana
Plasmodium falciparum
Toxoplasma gondii
Trypanosoma cruzi
(purvalanol B binding to casein **kinase** 1 of; intracellular targets of cyclin-dependent **kinase** inhibitors and identification by affinity chromatog. using immobilized inhibitors)

IT 52660-18-1
RL: BPR (Biological process); BIOL (Biological study); PROC (Process)
(1; intracellular targets of cyclin-dependent **kinase** inhibitors and identification by affinity chromatog. using immobilized inhibitors)

IT 141467-21-2
RL: BPR (Biological process); BIOL (Biological study); PROC (Process)
(II; intracellular targets of cyclin-dependent **kinase** inhibitors and identification by affinity chromatog. using immobilized inhibitors)

IT 143375-65-9, CDK1 **kinase**
RL: BPR (Biological process); BIOL (Biological study); PROC (Process)
(cyclin B complex; intracellular targets of cyclin-dependent **kinase** inhibitors and identification by affinity chromatog. using immobilized inhibitors)

IT 9031-72-5, Alcohol dehydrogenase 9074-10-6, **Biliverdin reductase** 90698-26-3, S6 **Kinase** II 137632-07-6, Erk1 **kinase** 137632-08-7, Erk2 **kinase** 141349-86-2, CDK2-**kinase** 147014-96-8, CDK5 **kinase** 150428-23-2, Cyclin-dependent **kinase** 212844-54-7D, Purvalanol B, agarose matrix-linked 289508-12-9D, agarose matrix-linked
RL: BPR (Biological process); BIOL (Biological study); PROC (Process)
(intracellular targets of cyclin-dependent **kinase** inhibitors and identification by affinity chromatog. using immobilized inhibitors)

IT 212844-54-7, Purvalanol B 220792-57-4
RL: BAC (Biological activity or effector, except adverse); BIOL (Biological study)
(**kinase** selectivity of; intracellular targets of cyclin-dependent **kinase** inhibitors and identification by affinity chromatog. using immobilized inhibitors)

L3 ANSWER 12 OF 24 TOXCENTER COPYRIGHT 2002 ACS DUPLICATE 6

AB Heme oxygenase (HO) cleaves the heme ring to form **biliverdin**, which is rapidly reduced to bilirubin, carbon monoxide, and iron. HO1, the first form of the enzyme discovered, is an. . . HO1 facilitates iron efflux. Bilirubin appears to be a physiologic neuroprotectant. Activation of HO2 by phorbol esters, that stimulate protein **kinase** C to phosphorylate HO2, augments production of bilirubin which protects brain cultures from oxidative stress. Bilirubin itself in nanomolar concentrations. . .

CT . . .
Attack, Transient: ME, metabolism
Ischemic Attack, Transient: PP, physiopathology
Kidney: CY, cytology
Mice
Mice, Knockout
NAD+ ADP-Ribosyltransferase: ME, metabolism
NADPH-Ferrihemoprotein **Reductase**: GE, genetics
NADPH-Ferrihemoprotein **Reductase**: ME, metabolism
*Neurons: CY, cytology
*Neurons: EN, enzymology
Oxidative Stress: PH, physiology
Signal Transduction: PH, physiology

CN EC 1.14.99.- (heme oxygenase-2); EC 1.14.99.3 (Heme Oxygenase (Decyclizing)); EC 1.6.2.4 (NADPH-Ferrihemoprotein **Reductase**); EC 2.4.2.30 (NAD+ ADP-Ribosyltransferase)

L3 ANSWER 9 OF 24 SCISEARCH COPYRIGHT 2002 ISI (R)
TI Nuclear localization of **biliverdin reductase** in the rat kidney: Response to nephrotoxins that induce heme oxygenase-1
AB **Biliverdin reductase** catalyzes the reduction of **biliverdin**, the product of heme oxygenase (HO) activity, to bilirubin. The **reductase** is unique among all enzymes characterized to date in being dual pH/cofactor-dependent. Until now the enzyme was assumed to be a noninducible cytosolic protein. This report, for the first time, demonstrates induction and nuclear localization of **reductase** in rat kidney in response to HO-1 inducers: bacterial lipopolysaccharide (LPS) and bromobenzene. The study also demonstrates that nuclear localization. . . to cGMP. Specifically 16 h after treatment of rats (i.p.) with LPS (5 mg/kg), there was an increase in nuclear **biliverdin reductase** as determined by immunostaining, Western blotting, and activity analysis. Induction and nuclear localization of the **reductase** in kidney was also observed in bromobenzene-treated rats (2 mmol/kg, s.c., 24 h). The **reductase** message levels, however, were not increased in response to either treatment, suggesting post-transcriptional activation of the **reductase** by LPS and bromobenzene. The mechanism of nuclear transport of the **reductase** was examined using HeLa cells transfected with the hemagglutinin-tagged **reductase** construct. When cells were treated with 8-BrcGMP the protein translocated into the nucleus. Mutation of the putative nuclear localization signal domain of the **reductase** blocked nuclear transport of the protein. We suggest the significance of nuclear localization of the **reductase** may relate to: 1) chain-breaking antioxidant activity of bilirubin; 2) inhibition of superoxide formation by bilirubin; and 3) modulation of. .

STP KeyWords Plus (R): ACTIVATED PROTEIN-**KINASES**; EMBRYO LIVER-CELLS; NITRIC-OXIDE; CARBON-MONOXIDE; CYCLIC-GMP; EXPRESSION; BILIRUBIN; PURIFICATION; GLUTATHIONE; SUPEROXIDE

L3 ANSWER 7 OF 24 CAPLUS COPYRIGHT 2002 ACS DUPLICATE 5
TI Human **biliverdin reductase** is autophosphorylated, and phosphorylation is required for bilirubin formation
AB **Biliverdin reductase** (BVR) reduces the heme oxygenase (HO) reaction product, **biliverdin**, to bilirubin. BVR is unique

in having dual pH/dual cofactor requirements. Using Escherichia coli-expressed human BVR and COS cells, the. . . treated at 60.degree. for 10 min. The loss of transferred phosphates by alk. treatment suggested that BVR is a serine/threonine **kinase**. Potato acid phosphatase treatment reversibly inactivated the enzyme. The enzyme was also inactivated by treatment with the serine/threonine phosphatase, phosphoprotein. . .

ST **biliverdin reductase** human phosphorylation bilirubin formation

IT Phosphorylation, biological
(autophosphorylation; human **biliverdin reductase** is autophosphorylated, and phosphorylation is required for bilirubin formation)

IT Phosphorylation, biological
(protein; human **biliverdin reductase** is autophosphorylated, and phosphorylation is required for bilirubin formation)

IT 9026-43-1, Protein **kinase**
RL: BAC (Biological activity or effector, except adverse); BIOL (Biological study)
(human **biliverdin reductase** is autophosphorylated, and phosphorylation is required for bilirubin formation)

IT 9074-10-6, **Biliverdin reductase**
RL: BAC (Biological activity or effector, except adverse); BPR (Biological process); BIOL (Biological study); PROC (Process)
(human **biliverdin reductase** is autophosphorylated, and phosphorylation is required for bilirubin formation)

IT 635-65-4, Bilirubin, biological studies
RL: MFM (Metabolic formation); BIOL (Biological study); FORM (Formation, nonpreparative)
(human **biliverdin reductase** is autophosphorylated, and phosphorylation is required for bilirubin formation)

L3 ANSWER 1 OF 24 MEDLINE

TI Human **Biliverdin Reductase** Is a Leucine Zipper-like DNA-binding Protein and Functions in Transcriptional Activation of Heme Oxygenase-1 by Oxidative Stress.

AB Human **biliverdin reductase** (hBVR) is a serine/threonine **kinase** that catalyzes reduction of the heme oxygenase (HO) activity product, **biliverdin**, to bilirubin. A domain of **biliverdin reductase** (BVR) has primary structural features that resemble leucine zipper proteins. A heptad repeat of five leucines (L(1)--L(5)), a basic domain,. . .

=> d his

(FILE 'HOME' ENTERED AT 15:23:01 ON 13 MAR 2002)

INDEX 'ADISALERTS, ADISINSIGHT, ADISNEWS, AGRICOLA, ANABSTR, AQUASCI, BIOBUSINESS, BIOCOMMERCE, BIOSIS, BIOTECHABS, BIOTECHDS, BIOTECHNO, CABA, CANCERLIT, CAPLUS, CEABA-VTB, CEN, CIN, CONFSCI, CROPB, CROPU, DDFB, DDFU, DGENE, DRUGB, DRUGLAUNCH, DRUGMONOG2, ...' ENTERED AT 15:23:31 ON 13 MAR 2002

SEA KINAS? AND BILIVERD? AND REDUCTAS?

3	FILE BIOSIS
1	FILE BIOTECHNO
2	FILE CABA
1	FILE CANCERLIT
10	FILE CAPLUS
2	FILE EMBASE
1	FILE ESBIOBASE

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                3   FILE GENBANK
                6   FILE MEDLINE
                2   FILE PASCAL
                4   FILE SCISEARCH
                8   FILE TOXCENTER
                7   FILE USPATFULL
L1               QUE KINAS? AND BILIVERD? AND REDUCTAS?
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     FILE 'CAPLUS, TOXCENTER, USPATFULL, MEDLINE, SCISEARCH, BIOSIS' ENTERED
     AT 15:25:15 ON 13 MAR 2002
L2            38 S KINAS? AND BILIVERD? AND REDUCTAS?
L3            24 DUP REM L2 (14 DUPLICATES REMOVED)

     FILE 'STNGUIDE' ENTERED AT 15:31:52 ON 13 MAR 2002

     FILE 'CAPLUS, TOXCENTER, USPATFULL, MEDLINE, SCISEARCH, BIOSIS' ENTERED
     AT 15:32:32 ON 13 MAR 2002

=> log h
COST IN U.S. DOLLARS                                SINCE FILE      TOTAL
                                                       ENTRY    SESSION
FULL ESTIMATED COST                                    11.50      55.41

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)          SINCE FILE      TOTAL
                                                       ENTRY    SESSION
CA SUBSCRIBER PRICE                                    -1.86      -1.86

 SESSION WILL BE HELD FOR 60 MINUTES
STN INTERNATIONAL SESSION SUSPENDED AT 15:34:47 ON 13 MAR 2002
Connection closed by remote host
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d his.

(FILE 'HOME' ENTERED AT 15:23:01 ON 13 MAR 2002)

INDEX 'ADISALERTS, ADISINSIGHT, ADISNEWS, AGRICOLA, ANABSTR, AQUASCI, BIOBUSINESS, BIOCOMMERCE, BIOSIS, BIOTECHABS, BIOTECHDS, BIOTECHNO, CABA, CANCERLIT, CAPLUS, CEABA-VTB, CEN, CIN, CONFSCI, CROPB, CROPU, DDFB, DDFU, DGENE, DRUGB, DRUGLAUNCH, DRUGMONOG2, ...' ENTERED AT 15:23:31 ON 13 MAR 2002

SEA KINAS? AND BILIVERD? AND REDUCTAS?

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3 FILE BIOSIS
1 FILE BIOTECHNO
2 FILE CABA
1 FILE CANCERLIT
10 FILE CAPLUS
2 FILE EMBASE
1 FILE ESBIOBASE
3 FILE GENBANK
6 FILE MEDLINE
2 FILE PASCAL
4 FILE SCISEARCH
8 FILE TOXCENTER
7 FILE USPATFULL

L1 QUE KINAS? AND BILIVERD? AND REDUCTAS?

FILE 'CAPLUS, TOXCENTER, USPATFULL, MEDLINE, SCISEARCH, BIOSIS' ENTERED AT 15:25:15 ON 13 MAR 2002

L2 38 S KINAS? AND BILIVERD? AND REDUCTAS?

L3 24 DUP REM L2 (14 DUPLICATES REMOVED)

Trying 3106016892...Open

Welcome to STN International! Enter x:x
LOGINID:ssspta1652dmr
PASSWORD:
TERMINAL (ENTER 1, 2, 3, OR ?):2

* * * * * * * * * * Welcome to STN International * * * * * * * * * *

NEWS 1		Web Page URLs for STN Seminar Schedule - N. America
NEWS 2	Sep 17	IMSworld Pharmaceutical Company Directory name change to PHARMASEARCH
NEWS 3	Oct 09	Korean abstracts now included in Derwent World Patents Index
NEWS 4	Oct 09	Number of Derwent World Patents Index updates increased
NEWS 5	Oct 15	Calculated properties now in the REGISTRY/ZREGISTRY File
NEWS 6	Oct 22	Over 1 million reactions added to CASREACT
NEWS 7	Oct 22	DGENE GETSIM has been improved
NEWS 8	Oct 29	AAASD no longer available
NEWS 9	Nov 19	New Search Capabilities USPATFULL and USPAT2
NEWS 10	Nov 19	TOXCENTER(SM) - new toxicology file now available on STN
NEWS 11	Nov 29	COPPERLIT now available on STN
NEWS 12	Nov 29	DWPI revisions to NTIS and US Provisional Numbers
NEWS 13	Nov 30	Files VETU and VETB to have open access
NEWS 14	Dec 10	WPINDEX/WPIDS/WPIX New and Revised Manual Codes for 2002
NEWS 15	Dec 10	DGENE BLAST Homology Search
NEWS 16	Dec 17	WELDASEARCH now available on STN
NEWS 17	Dec 17	STANDARDS now available on STN
NEWS 18	Dec 17	New fields for DPCI
NEWS 19	Dec 19	CAS Roles modified
NEWS 20	Dec 19	1907-1946 data and page images added to CA and CAplus
NEWS 21	Jan 25	BLAST(R) searching in REGISTRY available in STN on the Web
NEWS 22	Jan 25	Searching with the P indicator for Preparations
NEWS 23	Jan 29	FSTA has been reloaded and moves to weekly updates
NEWS 24	Feb 01	DKILIT now produced by FIZ Karlsruhe and has a new update frequency
NEWS 25	Feb 19	Access via Tymnet and SprintNet Eliminated Effective 3/31/02
NEWS 26	Mar 08	Gene Names now available in BIOSIS

NEWS EXPRESS	February 1 CURRENT WINDOWS VERSION IS V6.0d, CURRENT MACINTOSH VERSION IS V6.0a(ENG) AND V6.0Ja(JP), AND CURRENT DISCOVER FILE IS DATED 05 FEBRUARY 2002
NEWS HOURS	STN Operating Hours Plus Help Desk Availability
NEWS INTER	General Internet Information
NEWS LOGIN	Welcome Banner and News Items
NEWS PHONE	Direct Dial and Telecommunication Network Access to STN
NEWS WWW	CAS World Wide Web Site (general information)

Enter NEWS followed by the item number or name to see news on that specific topic.

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